

Case Report

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TANAFFOS 

Mediastinal Lymphangioma in a Child

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We report a case of a male child with a cystic mass in his left side of the neck with extension to the mediastinum. This article highlights the clinical and para-clinical findings and management of these cases.

In conclusion, it is necessary to evaluate the mediastinum for extension of the cyst in cases with cystic hygromas of the neck. Surgical resection of the tumor through a cervical incision can be considered.

Key words: Cystic hygroma, Children, Lymphangioma

INTRODUCTION

Cystic hygromas (lymphangioma) are benign and common developmental anomalies of vasculolymphatic origin. They can arise anywhere along the lymphatic system; however, they are usually located in the neck region and in most cases (80-90%) appear by the age of 2 years (1). Most mediastinal cystic hygromas are extensions of cervical lesions, and cystic hygroma confined solely to the mediastinum is rarely encountered (2). Enlargement of cystic lesions is common and may compress the adjacent organs, causing respiratory distress, feeding difficulties, or vascular compromise (3).

CASE SUMMARIES

A 3-year-old male child was referred to our hospital because of bulging of the left side of the neck of one month duration. His parents gave a history of dysphasia and dyspnea.

On examination, his general condition was good. A soft, mobile and nontender cystic lesion about 3 centimeters in diameter was palpable at the base of the left side of the neck. Other systemic examinations were normal.

Chest X-ray revealed a widened mediastinum. The CT-scan of the chest showed a cystic nonenhancing lesion in the superior mediastinum with extension to anterior mediastinum (Figures 1 and 2).

Diagnosis of cystic hygroma was made based on the clinical and radiological findings. The patient underwent surgery and the cystic mass was resected completely through collar incision in the base of the left side of the neck with no need for thoracotomy. Pathology report was compatible with cystic hygroma (lymphangioma) (Figure 3).

Postoperatively, the patient was doing well and his chest radiograph was normal.

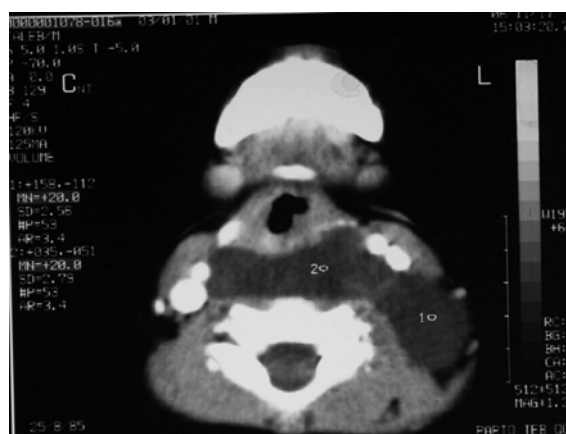


Figure 1. CT scan of the neck showing a large mass in the anterior and left side of the neck.

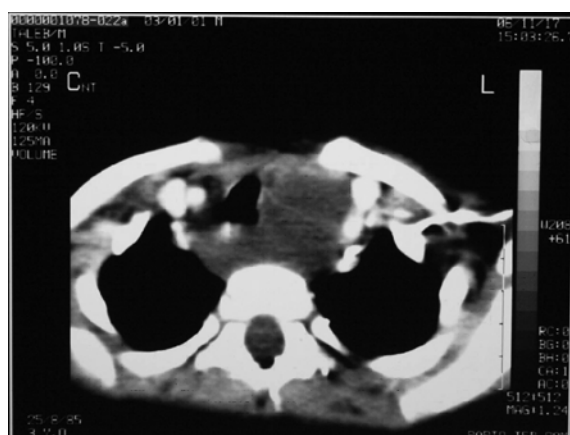


Figure 2. CT scan of the chest showing a large diffuse mass in the superior mediastinum with extension to the anterior mediastinum.

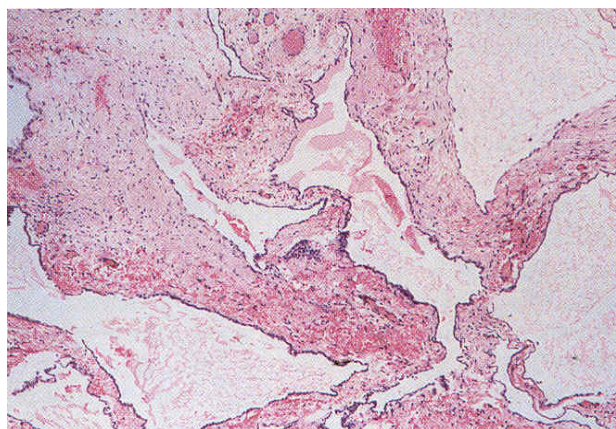


Figure 3. Lymphangioma, composed of large, interanastomosing vascular channels that contain wispy eosinophilic material and an endothelial lining.

DISCUSSION

Lymphatic malformations including lymphangiomas and cystic hygromas arise from the embryonic lymph sac and are the second most common developmental benign vascular tumors in children. About half are located in the head and neck area, followed by the axilla (20%)(4).

Most mediastinal tumors are usually extensions of cervical hygromas, as 2-3% of cervical hygromas have mediastinal extensions (5).

Association of cystic hygroma with growing venous aneurysm and relapse of neck mass in a 4 year-old female has been reported in a study conducted in USA in 2003 (6). In our case no venous involvement was detected.

In another study performed in Canada in 2006, 14 cases of cystic hygromas of the neck were treated with aspiration alone. In our patient, considering the size and wide extension of the cyst to the mediastinum, the preferred procedure was surgical resection through cervical region without open thoracotomy (7).

In another study, a giant single mediastinal cystic hygroma in a 3 year-old male was managed through thoracotomy in Saudi Arabia (8).

For localized mediastinal or solitary lung lesions, thoracotomy or thoracoscopic resection is recommended. Due to the complications of surgical treatment and high incidence of morbidity and recurrence, sclerosing with intralesional injection of OK-432 (streptococcal derivate) has been proposed. Laser therapy and IFN-alpha as a systemic therapy have also been used in selected patients (5).

In conclusion, in cases with cystic hygromas of the neck it is necessary to evaluate mediastinum for extension of the cyst and surgical resection of the tumor via a cervical incision can be considered.

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